

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**(Attorney Docket No 17475US02)**

**In the Application of:**

Akira Yamanaka, et al.

Serial № 10/773,610

Filed: February 6, 2004

For: METHOD AND SYSTEM FOR  
EQUALIZATION IN A COMMUNICATIONS  
SYSTEM

**Examiner: Emmanuel Bayard**

Group Art Unit: 2611

Confirmation № 7768

**Electronically Filed on 27-NOV-2007**

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Applicant requests review of the final rejection in the above-identified application, stated in the final Office Action mailed on August 30, 2007 (hereinafter, the Final Office Action) with a period of reply through November 30, 2007. The Applicant also requests review of the arguments stated on page 2 of the Advisory Office Action mailed on October 30, 2007 (hereinafter, the Advisory Office Action). No amendments are being filed with this request.

This request is being filed with a Notice of Appeal. The review is being requested for the reasons stated on the attached sheets.

### REMARKS

The present application includes pending claims 1-17, all of which have been rejected. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,690,739, issued to Mui (hereinafter, Mui). The Applicant respectfully traverses these rejections at least based on the following remarks.

### REJECTION UNDER 35 U.S.C. § 102

#### I. Mui Does Not Anticipate Claims 1-17

The Applicant first turns to the rejection of claims 1-17 under 35 U.S.C. 102(e) as being anticipated by Mui. With regard to the anticipation rejections under 102(e), MPEP 2131 states that “[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” See Manual of Patent Examining Procedure (MPEP) at 2131 (internal citation omitted). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See *id.* (internal citation omitted).

#### A. Rejection of Independent Claim 1 under 35 U.S.C. § 102(e)

With regard to the rejection of independent claim 1 under 102(e), the Applicant submits that Mui does not disclose or suggest at least the limitation of

“removing post cursor inter-symbol interference **within at least one error correction code word** in a block code based error correction scheme,” as recited by the Applicant in independent claim 1 (emphasis added).

The Final Office Action states the following:

Mui teaches a method for equalization in a communications system, the method comprising: an equalizer is the same as the claimed (removing post cursor inter-symbol interference) (see abstract and figs. 16-18 and 22 and col.5, lines 30-65 and col.8, lines 1-35 and col.12, lines 64-67 and col.31, lines 19-60 and col.34, lines 10-50) within an encoder having FEC or forward error correction is the same as the claimed (an at least one error code correction code word a block code based error correction scheme wherein said block code based error correction scheme is utilized in the communication system) (see figs. 17 and 22 and col.7, lines 59-65 and col. 12, lines 1-35).

See Final Office Action at page 2. The Applicant respectfully disagrees. Mui discloses an intersymbol interference compensation (ISIC) method, which uses an encoding step, performed by an encoder, and a data estimating step, performed by a data estimator. See Mui at Abstract. In addition, Mui discloses that the encoder performs a trellis encoding of a data sequence using a trellis forward-error-correction (FEC) code to provide an encoded sequence, which is supplied to a channel. See *id.* The data estimator of Mui, which processes a channel output sequence to arrive at an estimate of the data sequence, utilizes a template generator for generating templates, a partial equalizer for processing the channel output sequence to provide a partially equalized sequence that is substantially free of precursor ISI, and an ISIC decoder for trellis decoding and ISI compensation. In this regard, Mui only utilizes a trellis forward-error-

correction (FEC) code with regard to trellis encoding of a data sequence. The Applicant has reviewed Mui in detail and points out that Mui, including col.5, lines 30-65, col.8, lines 1-35, col.12, lines 64-67, col.31, lines 19-60, and col.34, lines 10-50 of Mui, **does not disclose or suggest any removing of post cursor inter-symbol interference within an error correction code word**. In fact, Mui only uses trellis forward-error-correction (FEC) codes to provide an encoded sequence, and **Mui is silent as to any processing with regard to the error correction code word itself.**

Therefore, the Applicant maintains that Mui does not disclose or suggest at least the limitation of “removing post cursor inter-symbol interference within at least one error correction code word in a block code based error correction scheme,” as recited by the Applicant in independent claim 1. Accordingly, independent claim 1 is not anticipated by Mui and is allowable. Independent claims 6 and 11 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 6 and 11 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

#### **B. Rejection of Dependent Claims 2-5, 7-10 and 12-17**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 102(e) as being anticipated by Mui has been overcome and requests that the rejection be withdrawn.

Additionally, claims 2-5, 7-10 and 12-17 depend from independent claims 1, 6 and 11, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2-5, 7-10 and 12-17.

## **II. Conclusion**

The Applicant respectfully submits that claims 1-17 of the present application should be in condition for allowance at least for the reasons discussed above and request that the outstanding rejections be reconsidered and withdrawn. The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: 27-NOV-2007

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